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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,084

03/24/2004

Michael J. Porsch

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EXAMINER

SERGEANT, RABON A

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/808,084	Applicant(s) PORSCH ET AL.	
	Examiner Rabon Sergent	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 16-42, 45-66 and 69-82 is/are pending in the application.
- 4a) Of the above claim(s) 3-5 and 32-34 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 62-66 and 69-82 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-13, 16-31, 35-42 and 45-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/18/08</u> . | 6) <input type="checkbox"/> Other: _____ |

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 18, 2008 has been entered.
2. Claims 31, 35-42, and 45-61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Within claim 31, applicants have claimed that a hydroxyl terminated prepolymer is terminated with either aminosilane or mercaptosilane; however, it is not seen how such a reaction can proceed given that hydroxyl groups will not react with either amino or mercapto groups.

3. Claims 31, 35-42, and 45-61 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants have failed to provide support for the subject matter of claim 31. Applicants have claimed that a hydroxyl terminated prepolymer is terminated with either aminosilane or mercaptosilane; however, applicants have failed to provide support for this reaction scheme and have failed to disclose how such a reaction can proceed, given that hydroxyl groups are not reactive with either amino or mercapto groups.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 2, 6-9, 12, 13, 16, 18-31, 35-38, 41, 42, 45, and 47-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. ('170) in view of Fenn et al. ('246).

Johnston et al. disclose compositions suitable for sealing and coating substrates comprising silane terminated polyurethane prepolymers and adhesion promoters, wherein the silane terminated polyurethane prepolymers are produced by reacting a secondary aminosilane, that corresponds to applicants' aminosilane, with an isocyanate terminated prepolymer, wherein the prepolymers are produced from polyols that correspond to those instantly claimed. Patentees further disclose that the compositions may contain catalysts as well as conventional additives, such as fillers, plasticizers, thixotropes, antioxidants, and UV stabilizers. See abstract and columns 2 and 4-7. Though patentees fail to disclose all of the applicants' claimed additives, the examiner takes official notice under MPEP 2144.03 that the claimed additives were well-known

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and conventional within the art at the time of invention. Accordingly, it would have been obvious to incorporate these components within the formulation for their art recognized purposes.

6. Johnston et al. are silent regarding applicants' claimed silane terminated monomeric diisocyanate component; however, the incorporation of silane functional oligomers, derived from the reaction of monomeric diisocyanates with secondary aminosilanes, within silane functional polymer coating compositions was known at the time of invention. Fenn et al. disclose that the use of such oligomers within silane functional polymer coating compositions improves such properties as water resistance, clarity, and hardness. See columns 2-4. Accordingly, the position is taken that it would have been obvious to incorporate such a component into the silane terminated polymer coating composition of the primary reference, so as to obtain a coating composition having the aforementioned improved properties.

7. Claims 1, 2, 6-9, 12, 13, 16-31, 35-38, 41, 42, and 45-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roesler et al. (US 2006/0173140) in view of Fenn et al. ('246).

Roesler et al. disclose compositions suitable for coating substrates comprising silane terminated polyurethane prepolymers, wherein the silane terminated polyurethane prepolymers are produced by reacting a secondary aminosilane, that corresponds to applicants' aminosilane, with an isocyanate terminated prepolymer, wherein the prepolymers are produced from polyether polyols having a degree of unsaturation that meets that claimed by applicants. Roesler et al. further disclose that the compositions may contain catalysts and solvents as well as conventional additives, such as leveling agents, wetting agents, flow control agents, antiskinning agents,

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antifoaming agents, fillers, viscosity regulators, plasticizers, pigments, dyes, UV absorbers and stabilizers against thermal and oxidative degradation. See abstract and paragraphs [0022] through [0031], [0036], [0037], [0041], [0042], and [0075] through [0078]. Though Roesler et al. fail to disclose all of the applicants' claimed additives, the examiner takes official notice under MPEP 2144.03 that the claimed additives were well-known and conventional within the art at the time of invention. Accordingly, it would have been obvious to incorporate these components within the formulation for their art recognized purposes.

8. Roesler et al. are silent regarding applicants' claimed silane terminated monomeric diisocyanate component; however, the incorporation of silane functional oligomers, derived from the reaction of monomeric diisocyanates with secondary aminosilanes, within silane functional polymer coating compositions was known at the time of invention. Fenn et al. disclose that the use of such oligomers within silane functional polymer coating compositions improves such properties as water resistance, clarity, and hardness. See columns 2-4. Accordingly, the position is taken that it would have been obvious to incorporate such a component into the silane terminated polymer coating composition of the primary reference, so as to obtain a coating composition having the aforementioned improved properties.

9. Claims 1, 2, 6-13, 16, 18-31, 35-42, 45, and 47-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. ('170) in view of Schmalstieg et al. ('751).

Johnston et al. disclose compositions suitable for sealing and coating substrates comprising silane terminated polyurethane prepolymers and adhesion promoters, wherein the silane terminated polyurethane prepolymers are produced by reacting a secondary aminosilane, that corresponds to applicants' aminosilane, with an isocyanate terminated prepolymer, wherein

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the prepolymers are produced from polyols that correspond to those instantly claimed. Patentees further disclose that the compositions may contain catalysts as well as conventional additives, such as fillers, plasticizers, thixotropes, antioxidants, and UV stabilizers. See abstract and columns 2 and 4-7. Though patentees fail to disclose all of the applicants' claimed additives, the examiner takes official notice under MPEP 2144.03 that the claimed additives were well-known and conventional within the art at the time of invention. Accordingly, it would have been obvious to incorporate these components within the formulation for their art recognized purposes.

10. Johnston et al. are silent regarding applicants' claimed silane terminated monomeric diisocyanate component; however, the use of silane functional oligomers, derived from the reaction of monomeric diisocyanates with secondary aminosilanes within coating compositions was known at the time of invention. The teachings of Schmalstieg et al. are considered to support this position since the reference discloses curable coating compositions containing terminal alkoxysilane groups wherein secondary amine alkoxy silanes are reacted with monomeric polyisocyanates. See abstract and columns 3-5. Since it has been held that it is *prima facie* obvious to combine two compositions, wherein each is taught by the prior art to be useful for the same purpose (coatings), in order to form a third composition which is to be used for the same purpose, the position is taken that it would have been obvious to combine the silane terminated prepolymer of Johnston et al. with the silane terminated monomeric diisocyanate of Schmalstieg et al. so as to obtain a coating composition. *In re Kerkhoven*, 205 USPQ 1069.

11. Claims 1, 2, 6-13, 16-31, 35-42, and 45-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roesler et al. (US 2006/0173140) in view of Schmalstieg et al. ('751).

Roesler et al. disclose compositions suitable for coating substrates comprising silane terminated polyurethane prepolymers, wherein the silane terminated polyurethane prepolymers are produced by reacting a secondary aminosilane, that corresponds to applicants' aminosilane, with an isocyanate terminated prepolymer, wherein the prepolymers are produced from polyether polyols having a degree of unsaturation that meets that claimed by applicants. Roesler et al. further disclose that the compositions may contain catalysts and solvents as well as conventional additives, such as leveling agents, wetting agents, flow control agents, antiskinning agents, antifoaming agents, fillers, viscosity regulators, plasticizers, pigments, dyes, UV absorbers and stabilizers against thermal and oxidative degradation. See abstract and paragraphs [0022] through [0031], [0036], [0037], [0041], [0042], and [0075] through [0078]. Though Roesler et al. fail to disclose all of the applicants' claimed additives, the examiner takes official notice under MPEP 2144.03 that the claimed additives were well-known and conventional within the art at the time of invention. Accordingly, it would have been obvious to incorporate these components within the formulation for their art recognized purposes.

12. Roesler et al. are silent regarding applicants' claimed silane terminated monomeric diisocyanate component; however, the use of silane functional oligomers, derived from the reaction of monomeric diisocyanates with secondary aminosilanes within coating compositions was known at the time of invention. The teachings of Schmalstieg et al. are considered to support this position since the reference discloses curable coating compositions containing terminal alkoxysilane groups wherein secondary amine alkoxy silanes are reacted with monomeric polyisocyanates. See abstract and columns 3-5. Since it has been held that it is *prima facie* obvious to combine two compositions, wherein each is taught by the prior art to be

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useful for the same purpose (coatings), in order to form a third composition which is to be used for the same purpose, the position is taken that it would have been obvious to combine the silane terminated prepolymer of Roesler et al. with the silane terminated monomeric diisocyanate of Schmalstieg et al. so as to obtain a coating composition. *In re Kerkhoven*, 205 USPQ 1069.

13. Applicants' response has been considered; however, it is insufficient to overcome the prior art rejections for the following reason. The examiner's indication that the subject matter of claim 67 is allowable pertains only to the claimed process. Accordingly, claims 62-66 and 69-82 have been allowed; however, the subject matter of claim 67 is insufficient to render the product claims allowable, because it has not been established that the process limitation of claim 67 yields a patentably distinct product. There is nothing on the record that indicates that the silane terminated prepolymer of the instant claims is distinct from the silane terminated prepolymer of the prior art.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

/Rabon Sergent/
Primary Examiner, Art Unit 1796

R. Sergent
March 18, 2007